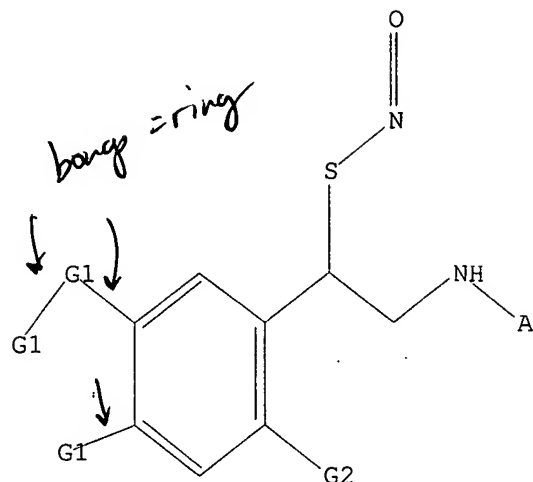


# STN Structure Search (Registry/Caplus)

10/512,024

12/17/2007

=> d  
L1 HAS NO ANSWERS  
L1 STR



G1 C, O, N  
G2 H, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1  
SAMPLE SEARCH INITIATED 16:39:00 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 2 TO 124  
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> d scan

12/17/2007

CN1C(C)(C)C(C)(C)N1C2=CC=C(C=C2)C3(C)N(C)C(C)(C)C3=O

ALL ANSWERS HAVE BEEN SCANNED

10/512,024

12/17/2007

=> s l1 full ✓  
FULL SEARCH INITIATED 16:39:24 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - ✓ 16 TO ITERATE

100.0% PROCESSED ✓ 16 ITERATIONS  
SEARCH TIME: 00.00.01

4 ANSWERS

L3 4 SEA SSS FUL L1

=> fil caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
172.10	172.31

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 16:39:28 ON 17 DEC 2007  
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=> s l3  
L4 1 L3  
=> d ibib abs hitstr

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:855797 CAPLUS  
 DOCUMENT NUMBER: 139:350628

TITLE: Preparation of pyrrolidine derivatives having nitric oxide donor groups or reactive oxygen species scavenger groups for treatment of respiratory disorders

INVENTOR(S): Haj-Yehia, Abdullah Ibrahim  
 PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew University of Jerusalem, Israel

SOURCE: PCT Int. Appl., 105 pp.  
 CODEN: PIXXD2

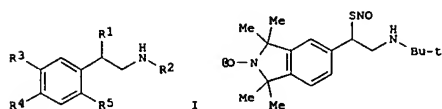
DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

*Instant App.*

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003088961	A1	20031030	WO 2003-IL312	20030415
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003226603	A1	20031103	AU 2003-226603	20030415
EP 1503754	A1	20050209	EP 2003-746878	20030415
EP 1503754	B1	20051123		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
JP 2005533013	T	20051104	JP 2003-585713	20030415
AT 310514	T	20051215	AT 2003-746878	20030415
US 2005228184	A1	20051013	US 2005-512024	20050509
PRIORITY APPLN. INFO.:			US 2002-374173P	P 20020419
			WO 2003-IL312	W 20030415

OTHER SOURCE(S): MARPAT 139:350628  
 GI



L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)  
 AB The title compds. I [wherein R1 = OH, ONO, ONO2, SNO, or NONO; R2 = reactive oxygen species (ROS) scavenger group or NO donor group, etc.; R3 and R4 = independently OH, CH2OH, NH2, or NHCHO; or R3 and R4 together form a substituted heterocycle or a protecting group; R5 = H, OH, CH2OH, NH2, NHCHO, alkyl, or alkoxy; etc.] and salts, solvates, or optical isomers thereof are prepared as  $\beta$ -agonists for the treatment of respiratory diseases involving airway obstruction, such as asthma or chronic bronchitis. For example, the compound II-HCl was prepared in a multi-step synthesis. II showed a more relaxation effect than salbutamol in guinea pig.

IT 618438-41-8P 618438-42-9P 618438-59-8P  
 618438-60-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

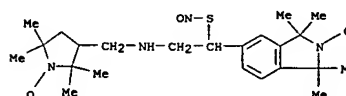
oxide (drug candidate; preparation of pyrrolidine derivs. having nitric

donor groups or reactive oxygen species scavenger groups for treatment of respiratory disorders)

RN 618438-41-8 CAPLUS

CN 2H-isoindol-2-yloxy,

1,3-dihydro-1,1,3,3-tetramethyl-5-[1-(nitrosothio)-2-[[[(2,2,5,5-tetramethyl-1-oxy-3-pyrrolidinyl)methyl]amino]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



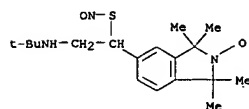
● HCl

RN 618438-42-9 CAPLUS

CN 2H-isoindol-2-yloxy,

5-[2-[[[(1,1-dimethylethyl)amino]-1-(nitrosothio)ethyl]-1,3-dihydro-1,1,3,3-tetramethyl-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

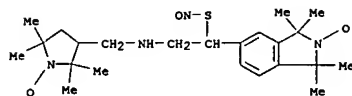


● HCl

RN 618438-59-8 CAPLUS

CN 2H-isoindol-2-yloxy,

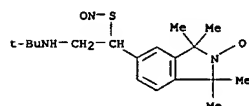
1,3-dihydro-1,1,3,3-tetramethyl-5-[1-(nitrosothio)-2-[[[(2,2,5,5-tetramethyl-1-oxy-3-pyrrolidinyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)



RN 618438-60-1 CAPLUS

CN 2H-isoindol-2-yloxy,

5-[2-[[[(1,1-dimethylethyl)amino]-1-(nitrosothio)ethyl]-1,3-dihydro-1,1,3,3-tetramethyl-, monohydrochloride (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

548/467

C07D 209/44

548/470

574/414

A61K31/4035

574/416

A61K31/